9th International Conference of the International Society for Third- Sector Research

Istanbul – Turkey

July 7-10, 2010

RATES OF PARTICIPATION IN VOLUNTEERING AND CHARACTERISTICS OF VOLUNTEERS: EUROPEAN COMPARISONS

Cesaltina PIRES

University of Evora,

Adress: Largo dos Colegiais, 2, 7000-803 Évora, Portugal

Email: cpires@uevora.pt

Lionel PROUTEAU

University of Nantes, LEMNA (Laboratoire d'économie et de management de Nantes Atlantique)

Adress: Chemin de la Censive-du-Tertre 44313 Nantes CEDEX 3, France

Email Lionel.Prouteau@univ-nantes.fr

Boguslawa SARDINHA

Escola Superior de Ciências Empresariais - Polytechnic Institute of Setúbal

Adress: Campus do IPS,Estefanilha. 2914-503 Setúbal, Portugal

Email: boguslawa.sardinha@esce.ips.pt

1. Introduction

In Europe the number of volunteers would be around 100 millions. A Eurobarometer survey in 2006 revealed that 3 out of 10 Europeans claim to be active in a voluntary activity and that close to 80% of the respondents feel that voluntary activities are an important part of democratic life[1].

Although Europe is a rather small continent, it has been influenced over the centuries by many overlapping cultures. Whether it is a question of West as opposed to East or Christianity as opposed to Islamism, many have claimed to identify cultural fault lines across the continent. There are many cultural innovations and movements, often at odds with each other, such as Christian proselytism or Humanism. Thus the question of "common culture" or "common values" is far more complex than it seems to be. It is also important to consider the historical and economic contexts, including both the recent past as well as more far away historical times. These differences which are the wealth of Europe influence probably the volunteer behavior in its constituent countries.

In this paper we study formal volunteering, that is volunteering carried out through organizations. More precisely, we intend to adopt a European comparative approach to explore some issues concerning this volunteering. For this purpose, we draw on the data from the third wave of European Values Survey (EVS) gathered by the European Systems Study Group (EVSSG). It is very difficult to find data sets which allow international comparative investigations on volunteering. There are an increasing number of national studies on this subject, but their comparison is a hazardous exercise because their methodology is often different and we know that these differences may have great effects concerning the estimates of volunteering (Steinberg et al. 2002). The *Manual on the measurement of volunteer work*, presently developed on initiative of International Labor Organization (ILO) and Center for Civil Society Studies would be particularly useful to change this situation and to make national surveys more homogeneous. Until its recommendations have been implemented in a sufficient number of countries, European Values Survey is an interesting source for such comparisons even if the number of individuals in each national sample is restricted and even if its results are obviously

[1] From http://www.efc.be/EUAdvocacy/Pages/2011EuropeanYearofVolunteering.aspx

sensitive to the sampling method adopted in each country. The data were collected between 1999 and 2001 from an identical questionnaire. They provide rich information particularly about a crucial component of social change: the values, beliefs and motivations of ordinary citizens. Respondents are required to look at a list of voluntary organizations and activities then they are asked if they belong to one or several of these organizations and if they do voluntary work for them. These questions allow us to identify activities which, with a high probability, pertain to formal volunteering, though we cannot exclude that in some cases, the answers refer to informal volunteering. Unfortunately, this survey does not give any information on the hours dedicated to voluntary activities. Thereby, we can only examine the propensity to volunteer.

In the next section, we present and comment some descriptive statistics concerning the rate of volunteer participation for each country and the distribution of volunteers according to the types of unpaid activities. Then, we study the effect of some demographic, socioeconomic and attitudinal characteristics of European people on the likelihood of giving time, at the aggregate and disaggregate levels of volunteering. In Section 4, using a multilevel analysis, we investigate the influence of some country-level variables to explain the differences in the national propensities to volunteer. Section 5 concludes.

2. Descriptive statistics on volunteering in European countries

2.1. Participation rates

Table 1 presents the participation rates of all the countries concerned by the third wave of EVS. Because the weighted rates provide more representative results, we consider them in our comments. At the time of the survey, Turkey and Russian Federation had the lowest participation rate in volunteering (6.4% and 7.9% respectively) while Sweden had the highest one (56.4%).

Insert Table 1 here

Let us split up the countries in three categories:

- The first category is made up of countries having a low level of volunteering that is to say with participation rates below 25%.

- The second category has a medium level of volunteering, with participation rates between 25% and 35%.
- The third group has a high level of volunteering with participation rates above 35%.

The first category groups Germany (West and East), Spain, Portugal, Northern-Ireland, Estonia, Latvia, Lithuania, Poland, Hungary, Romania, Bulgaria, Croatia, Russia, Ukraine, Belarus and Turkey. So we have almost all post-socialist countries. There are some explanations about the low level of volunteer participation in these countries. Following Salomon et al. (1999), in the former socialist countries of Central and Eastern Europe "the concept of volunteering became obsolete, contaminated by decades of state and party requirements to contribute time and efforts freely for some common social, cultural, or political cause". After 1989, countries in the region set out to modernize their social service and health care systems. In doing so, the governments paid very little attention to the role and potential contributions that non-profit organizations and volunteering could make to improving state-run institutions, many of which were under-funded and short-staged. So, these ex-socialist countries do not present a favorable ground for volunteering. Following Gocko (2006), there are three main reasons for the lack of participation on volunteering: the first reason is related to a lack of tradition transmitted from generation to generation, the second one is related to the relative poverty, which leads to dedicate most energy to satisfy the basic needs first, and the last one is related to the relatively low social sensibility concerning social action.

In the same first category, we find Turkey where the volunteering activity has an incipient history which may explain a so low participation rate. Only after the Second World War, trough the United Nations help, it was possible to create the foundation for social and volunteering work. The social services institute was created in Turkey in 1959 (Bulut 2003). After that, it was possible to increase social services especially by founding schools to educate social workers. There are ongoing protocols between non-governmental organizations and the agency with the purpose of using resources more effectively and encouraging the volunteering people and organizations into the social services.

In this first category, we also find the Iberian countries. The 20th century dictatorships, which limited all social organizations except the ones which were controlled by the state,

might be an explanation for a low dynamism of associations and low levels of participation. Another explanation might be related to a possible higher importance of informal volunteering in these countries, with a higher role of family relations. The Spanish social sector is still very young. Almost every association was created after 1977 that is to say after the fall of Franco's dictatorship. Spain is one of the European countries with the lowest associational tradition. The late 80's and early 90's represented therefore the volunteering "boom" in Spain, with a significant increase of the associational movement (i.e. not-for-profit and voluntary organizations) referring to the social, cultural, sports and educational fields (Garcia *et al.*, 2004). In Portugal volunteering was influenced by Christian values and had as objective to create the family support structures[2]. The first organizations were created in the 12th century with charity and social support objectives. In the 20th century, only after the fall of dictatorship, new kinds of volunteering organizations promoting human rights, environmental issues, and cooperation for development, local development, culture and sport appeared.

More amazingly, this category of countries with a low level of volunteer participation includes Germany where voluntary service programs have a long tradition. This result is at variance with other data sets concerning this country. For instance a German government survey on volunteering conducted in 2004 shows that 36 percent of the respondents claim to be a volunteer (Herzig, 2004). Such a discrepancy between these results makes us cautious in our comments. Nevertheless, we can observe that individuals who are living in East German Länder are less inclined to volunteer than those who are living in West Germany are. Due to the division of Germany during more than four decades, volunteering has known a different development. In the former German Democratic Republic (GDR), it was mostly closely related to "mass social organizations" (gesellschaftliche Massenorganisationen). Although the GDR constitution guaranteed the freedom of association, all organizations (such as political parties, trade unions or voluntary organizations) had to accept the supreme authority of the Socialist Unity Party (Sozialistische Einheitspartei Deutschlands, SED).

[2] See *Voluntary action in Portugal. Fact and Figures Report*, The European Volunteer Centre, 2008.

In the second category there are diversified countries: France, Austria, Italy, Iceland, Ireland, Czech Republic, Malta, Luxembourg and Slovenia. In Italy, the important changes in the political and social structures (the extremists' activities of the 1970s, the social crisis of the 1990s) and the lack of clear definition about the positioning of volunteering in the social sector might explain the lower level of "social participation" of Italians. However there are many volunteers involved in the social economy enterprise sector especially in the cooperative sector. The National Institute of Statistics carried out a two-year study (2004/2005). The survey's results identified a few characteristics of voluntary organizations (VOs) in Italy such as a stronger presence of VOs in the northern regions, even if in the last few years VOs increased at a bit quicker rate in the centre and south of Italy, and a small organizational dimension of VOs both as regards the number of active volunteers and the amount of economic available resources[3].

France is included in this category with a participation rate of 26.1% in 1999, which is rather close to those obtained from other studies. For instance Archambault and Boumendil (1997) find a rate of 23.4% in 1996 and Prouteau and Wolff (2004) give a rate of 27.6% in 2002. In the same category, we also find Ireland. In this country, voluntary activities in sports associations and in rural agriculture-based communities have helped to build social solidarity and have strengthened the community[4]. Due to increasing political and financial support, the second half of the 20th century saw the birth and growth of a community development movement that concentrated on social issues in urban areas and rural ones as well. In Austria, 30.3% of the population claimed to participate in volunteer activities. Considering formal and informal volunteering, Badelt and Hollerweger (2001) indicated that almost 51% of the population in Austria worked in such unpaid activities. People from ethnic minorities (about 7% of population in 2001) are more active informally in the framework of large social and family networks.

Czech Republic is included in this second category, too. However this result is very surprising and at odds with information from other sources. For instance, the European

[3] See *Voluntary action Italy. Fact and Figures*, The European Volunteer Centre, 2006

[4] See http://www.volunteeringireland.ie/page.php?id=16

Volunteer Centre notes that: *"about 22% people were volunteering before 1989. The year 1989 represents then a starting point of decline: only 16% of respondents' effect volunteering after 1989 with a poor percentage of 6% of new coming volunteers. The same survey counts that in 1999 8% of the total Czech population were volunteers"* [5]. In a same vein, Salamon and Sokolowski (2001) rank Czech Republic amongst the countries having a very low amount of volunteering.

The third category contains the Scandinavian countries (Finland and Sweden), Denmark, Netherlands and Belgium, Great Britain, Greece and Slovakia. Powell and Steinberg (2006) write that, in the Nordic countries, "the expressive function of the nonprofit sector are far more prominent then the service one as a consequence of the heritage of social based civil movements and citizens engagement in advocacy, sports and related expressive fields". As for Grönlund and Yeung (2006), they note that "Christian voluntarism plays a role both in supporting the Finnish welfare system and promoting active citizenship and participation that are elements of a vital civil society." .

In Denmark, the development of democracy and the welfare state are based upon an interaction between Volunteer Denmark organizations and the public sector[6]. Volunteer Denmark is a network of volunteer social organizations, sports associations, cultural and ecclesiastical organizations, education associations for adults, youth groups, associations for persons with disabilities, patients associations, resident associations, grass-roots organizations, international NGOs and many more.

Without surprise, Great-Britain is included in this third category with a rate of participation of 43.1% in 1999, which is an intermediate estimate between the one from the 1997 National Survey of Volunteering (48%) for the United-Kingdom and the one from the 2001 National Survey of Volunteering for this same country (39%)[7]. On the contrary, we may be astonished to see Slovakia in this category. Indeed, according to Salamon and Sokolowski (2001), the amount of volunteering in this country is amongst the lowest ones. Thereby, once again, there is a serious divergence between the estimates from the Johns Hopkins Comparative Nonprofit Sector Project and those from European Values Survey.

---

[5] *Volunteering in Czech Republic Fact and Figures Report*, The European Volunteer Centre, 2007.

[6] See http://www.kum.dk/sw4458.asp

[7] See Low et al. (2007).

2.2. Distribution of volunteers according to the types of volunteering

The data we use allow us to distinguish different types of volunteering. For this purpose, we build up six groups of unpaid activities. The first group puts together the activities done in the framework of organizations dedicated to social welfare for elderly, handicapped or deprived people services, to youth work and to health problems. In our paper this type is named "social volunteering". The second group concerns education, arts, music, cultural activities as well as recreation and sports and is named "Leisure activities". We would have preferred to distinguish education from the other activities but it was impossible. Unpaid work done for trades unions, professional associations and political parties constitute the third group named "occupational and political volunteering". The fourth group is named "Defense-of-causes volunteering" and put together activities related to Third-world development, defense of human rights, environment protection, women's groups and peace movement. "Religious volunteering" is the fifth type and the last one, named "other volunteering", brings together volunteering devoted to local community action and to what questionnaire calls "other groups". We are absolutely aware that our choices concerning these groups of activities are debatable: other choices are possible. However, we think that this preliminary typology gives useful pieces of information for our explanatory study.

Insert Table 2 here

The percentage distribution of participants according to the six types shows different patterns of volunteering in Europe (Table 2). The sum of percentages is higher than 100 because volunteers may do several types of unpaid activities. In a majority of countries, leisure volunteering is the predominant type, mobilizing sometimes almost one volunteer out of two (particularly in Luxembourg, Iceland, Ireland, France, Denmark, Sweden and Austria) and even more than half of them (Netherlands). This is an interesting result which shows that volunteer work represents a very important labor force for nonprofit organizations of leisure sector.

A second configuration is constituted by countries where occupational-political volunteering is the most important type, at least in relative terms. We find in this group Turkey, Russia and some countries of Eastern Europe (Belarus, Bulgaria, Ukraine and Romania). In Turkey, this type of voluntary activities keeps occupied more than six

volunteers out of ten. It would be questionable to explain such a situation by a high rate of unionization. Indeed, seen from this angle, the concerned countries are heterogeneous. Unionization is low in Turkey[8] while it is higher in Russia and Ukraine. Therefore we are rather inclined to think that this configuration reveals the serious weakness of civil society organizations.

A third pattern is defined by the importance of religious volunteering. In Northern-Ireland, Lithuania, Poland, Hungary and Malta, this type of volunteering is the most frequent one. Though it is in second position (behind voluntary work for leisure organizations), it is also very important in Sweden since it mobilizes more than 4 volunteers out of 10.

The last configuration is represented only by Great-Britain with a great majority of participants in social volunteering. Though such a situation is unique, we can observe that in other countries the same type of volunteering has a non negligible importance. It concerns at least one third of volunteers in Luxembourg, Iceland, Finland, Belgium, Italy, Northern-Ireland and Greece.

3. Determinants of volunteering

Researchers from different fields of social sciences have paid attention to the influence of individual demographic, socioeconomic and personality characteristics on volunteering (for an overview, see for instance Smith, 1994, and Wilson, 2000). Some results are sufficiently convergent to permit rather reliable conclusions. In particular, a high education level enhances the proclivity to volunteer. Wilson (2000, p. 219-220) considers that level education is the most consistent predictor of volunteering and that “education boosts volunteering because it heightens awareness of problems, increases empathy, and builds self-confidence". The increase in domestic income is often found to play a positive role concerning the decision to participate (Prouteau and Wolff, 2004; Garcia-Mainar and Marcuello, 2007, Hackl et al., 2009). Residence in rural areas or in small towns is associated with higher voluntary participation (Smith, 1994; Prouteau and Wolff, 2004).

Having children in the household is both a constraint and an opportunity regarding volunteering. On the one hand, taking care of children and educating them are demanding

[8] According the website of OECD this rate is 10% in 2001.

and time consuming tasks, thus leaving less time for other activities such as volunteering. On the other hand, children are likely to be involved in sports and youth activities that are frequently associated with nonprofit organizations, increasing the parents' probability of getting involved in related voluntary activities. The distinction between school-aged children and younger children is obviously important concerning this question. The presence of very young children at home dissuades parents, and particularly mothers, from doing volunteering. On the contrary, the presence of school-aged children is an incentive factor (Rotolo and Wilson, 2007).

Generally, an inverted-U relationship between age and volunteering is found (Menchik and Weisbrod, 1987; Wilson, 2000; Prouteau and Wolff, 2004; Hackl et al., 2009). Gender and marital status have more ambiguous effects. Concerning gender, Wilson (2000) observes that the results may change according to countries. The same author notes also that "the effect of marital status on volunteering is contingent on a number of other factors" (p. 225).

Religious behavior and particularly church attendance are less considered by the studies on the determinants of volunteering. However, these variables have an important effect on voluntary participation. Individuals who attend more frequently church are more inclined to volunteer (Wilson and Musick, 1997; Becker and Dhingra, 2001; Prouteau and Wolff, 2004; Bekkers, 2005 and 2007).

For the purpose of our investigation from EVS data, we include all the above-mentioned characteristics as well as a variable about the situation of respondents towards employment. In addition, we include three attitudinal variables concerning the political orientation of individuals, their degree of confidence in security and social system and the degree of satisfaction with the democracy. In their work from European Values Survey and World Value Survey, Hackl et al. (2009) consider political attitudes too. They construct their variable by using the following question: "If there were a national election tomorrow, for which party on this list would you vote?". Then they categorize the parties in each country. We have preferred to use another question. Respondents are asked to place themselves on a scale from 1 (left) to 10 (right). We have constituted four categories: left (responses 1 to 4,) middle ground (responses 5 and 6), right (responses 7 to 10) and a last category which concerns the individuals who have not given response, either because they do not want to

reveal this type of information or because they do not admit the left-right categorization. Regarding political orientation variable, Hackl et al. (2009) find that right-wing persons have a higher propensity to volunteer than left-wing ones.

With respect to the degree of confidence in social security system, we distinguish three categories of respondents. The first one is made up by the individuals who have a great deal or quite a lot confidence. The second category is made up by those having not very much or not at all confidence ant the third one by persons who have refused to answer. In the same way, concerning the satisfaction towards democracy, we have distinguished the individuals who are very or rather satisfied, those who are not very or not at all satisfied and those who have not answered this question. The predicted effects of these two variables are ambiguous. On the one hand, a high degree of satisfaction with democracy and a high degree of confidence in social security system may engender among citizens positive attitudes towards the society. Such positive attitudes include a sense of trust, efficacy, confidence and satisfaction and together create a reserve of public-spirited goodwill which might benefit voluntary involvement. On the other hand, individuals who are not satisfied with democracy and who do not have confidence in social security system may be more inclined to volunteer to improve this unsatisfactory situation.

Last, we introduce dummies for each country by using France as the reference category. Table 3 shows the estimates of regressions concerning aggregate volunteering (column 1) and the six above-defined types (columns 2 to 8). Regarding the effect of individual variables on aggregate volunteering, several results are in line with the ones obtained from previous researches. As expected, level of education has an important positive influence on the inclination to volunteer. Church attendance, and particularly the regular one, has a powerful favorable impact on participation. The higher is the domestic income, the higher the individual probability of volunteering. The age profile of volunteers exhibits an inverted-U shape with a peak around 48 years. The presence of a very young child (below 5 years old) has a dissuasive impact on volunteering while the opposite is true when children are older. People living in rural areas or small town are more frequently volunteers than those living in large towns. Concerning the gender variable, women are less likely to volunteer. Having a paid job is associated to higher probability of volunteering. All these characteristics have statistically significant effects though the magnitude of their

coefficients is different. In this respect, education level and religious variable play clearly a predominant role. Living with a partner has no effect on the propensity to do volunteering.

Insert Table 3 here

Regarding the political orientation variable, our results do not corroborate those found by Hackl et al (2009). Right-oriented individuals do not volunteer more than left-oriented ones but respondents who place themselves in the middle-ground are less often participant, like those who refuse to place themselves on this left-right scale. Neither the degree of confidence in security social system nor the degree of satisfaction with democracy seem to have impact on volunteering, but the individuals who do not answer these questions are less inclined to volunteer. Such results lead to wonder about the standpoint of individuals grouped together in these non-respondent categories. Do they truly have no opinion on the subject? Do they want to conceal their point of view and if it is the case, what is their point of view? These questions do not find easy replies and they deserve a further investigation from responses given to numerous other attitudinal variables. Such an investigation goes beyond the scope of this paper.

Now we turn to the results relating to the different types of volunteering. Concerning the religious volunteering regression, we are faced with a problem. Is it relevant to include church attendance among the explanatory variables? Indeed, we can expect that there are very few respondents belonging to the reference category for this variable who do such a volunteering since they are without religious beliefs (and consequently without church attendance)[9]. After careful consideration, we present the estimates from two regressions. The former (religion - a) includes the concerned variable as covariate and the latter (religion - b) does not. We can see that the coefficients of some variables differ in the two regressions. It is particularly the case of gender and the place of residence. This is not a surprise since these two variables are correlated with religious behavior. Church attendance is more frequent among women and among inhabitants in rural areas. We let the reader judge which of these two regressions is more appropriate.

From Table 3, we observe that two individual characteristics have a homogeneous effect: education level and religious behavior. All the types of volunteering are stimulated by the

[9] From the data of EVS, in this category, only 23 respondents out of 8795 claim to do religious volunteering.

increase in education level. There are no exceptions. Similarly, the individuals who attend church (an in particular those who do it regularly) have a higher participation in all the types of volunteering, even if this effect is less important for occupational and political volunteering. The increase in domestic income has a positive influence on most types of involvement except volunteering oriented towards the defense of causes and the one which is dedicated to religious organizations.

Other individual characteristics play a more ambiguous role. In some cases, age profile is bell-shaped (occupational and political volunteering, defense-of-causes volunteering and the religious one. This result is expected concerning the occupational volunteering since this type of involvement generally stops when individuals retire. In other cases, the voluntary participation is an increasing function of age ("other" volunteering and the leisure one). Social volunteering is not affected by this variable. The presence of a very young child at home is unfavorable to defense-of-causes volunteering, social volunteering and the leisure one, but it is without impact on the other types. As expected, having school-aged children is a stimulus to participate in leisure volunteering because the children may be beneficiaries of unpaid parental activities. More surprisingly, such a family situation enhances the occupational and political volunteering too, but it exerts a negative impact on defenses-of-causes one.

Individuals who live with a partner are more inclined to participate in occupational and political volunteering but they have a lower probability to do social and religious voluntary works. As expected, having a paid job is a very important factor favorable to occupational and political volunteering but it is also the case, though to a less extent, for leisure volunteering. On the contrary, this variable plays a negative role on defense-of-causes volunteering and the religious one. Gender characteristic has a contrasted effect according the types of unpaid activities. Women are more likely to participate in religious and social voluntary works. On the contrary, men are more often participant in leisure volunteering, "other" volunteering and the professional and political volunteering one. Except for social

volunteering and the professional and political one, living in rural areas and in small towns increases the probability of participating[10].

Regarding our attitudinal variables, it is interesting to note that the influence of political orientation differs according to the type of unpaid activities. Clearly, left-oriented individuals are more inclined to do volunteering dedicated to occupational and political organizations or the defense-of-causes ones than middle-ground and right oriented people are. The opposite is true with respect to religious volunteering: right-oriented respondents and, in one of the two regressions (b), middle-oriented ones have a higher probability to participate.

The degree of satisfaction with democracy plays rarely a role on the propensity to volunteer. People who are not satisfied do more often defenses-of-causes volunteering, probably because such a discontent incites them to give time to change the things. We note the same effect of this variable on "other" volunteering and on the religious one when church attendance is included among the covariates (regression – a). Finally, the degree of confidence in social security system has almost no effect, except on religious volunteering when religious behaviour is not included as explanatory variable (regression – b). In this case, people who do not have confidence in the system have a lower probability of participating.

4. What influence of country-level variables on volunteering?

In addition to the study of the volunteers' profiles, Table 3 allows us to examine the country effects. For this purpose, we have to observe the coefficients of the country dummies which give the national propensities for volunteering after controlling for the characteristics of populations. It is useful to recall that these coefficients have to be interpreted by comparison with the French case used as reference. The obtained estimates point out clear differences between the European countries. Table 4 ranks these coefficients in descending order to make easier the comparative description. The results obtained from our descriptive statistics (section 2) are greatly confirmed but useful additional points are

[10] As mentioned above, the impact of the place of residence on religious volunteering disappears if we include in the regression the religious behavior of respondents.

given. For instance, from table 1, we could conclude that the rates of participation in aggregate volunteering in Luxembourg and Iceland are higher than the French one, but these differences are no longer statistically significant from table 3. In addition, the latter table provides information on the activity domains of volunteering which complement the observations from table 1.

Northern Europe has clearly the highest tendency to volunteer. Sweden is almost always at the top (and always amongst the top four) of this ranking whatever the type of volunteering. Finland, Iceland and Denmark, too, show a high propensity to volunteer with very few exceptions regarding the types of volunteering. Netherlands and Great-Britain are in a quite similar situation[11]. As already mentioned in our section 2, we obtain more surprising estimates concerning Slovakia and Czech Republic which are also well positioned in the upper part of the table. At the lower part of table 4 we find Russia, Turkey and most of countries of Eastern and central Europe, except Slovakia, Czech Republic and, to some extent, Latvia and Slovenia which are in the middle of the ranking. With the exception of Greece, the countries of Southern Europe have rather low propensity to volunteer too.

Insert table 4 here

Drawing on the typology of non-profit models used by Salamon and Anheier (1998) and Archambault (2001)[12], we can confirm that social democratic regime (Sweden, Finland, and Denmark) appears to be particularly favourable to volunteering whereas the reverse is true for the Mediterranean regime and for the Eastern and Central Europe with a few exceptions. The countries belonging to the corporatist regime (Belgium, France, Luxembourg, Austria, and Germany) are in an intermediary position except Netherlands which is comparable with the social democratic regime. The liberal model is only represented in our sample by Great-Britain but table 3 confirms its high level of volunteering.

---

[11] Netherlands has a rather poor tendency concerning the professional and political volunteering whereas the rank of Great-Britain is low as regards the “other” volunteering and the leisure one.

[12] Referring to Esping Andersen (1990) and considering two variables, the size of non profit sector and the level of government social welfare spending, Salamon and Anheier (1998) distinguishes four non-profit regimes: the social democratic regime, the liberal one, the corporatist one and the statist one. In its typology, Archambault (2001) ignores the statist model but adds the Mediterranean one.

4.1. A multilevel analysis

Such observations are not new. The explanations of the differences between countries are less documented. These differences may be induced by cultural, institutional, social and economic factors. Consequently, some works have endeavoured to study the relation between the voluntary behaviour and macro-structural variables. In particular, several authors have analysed the influence of social expenses on the voluntary behaviour. This question is an important one because it concerns the "crowding effects" of public action on volunteering. Is the public action a stimulus for private gifs ("crowding in" effect) or, on the contrary, does it weaken the private incentive for contributing ("crowding out")? "Crowding effects" have principally been studied on the monetary gifts but less often on the voluntary work. In addition, the results do not allow robust conclusions in favour of the "crowding out" assumption. Menchik and Weisbrod (1987) do not find a negative impact of the expenditure level of local governments on aggregate volunteering in the United States but their conclusions are more mixed concerning the different types of voluntary work: some of them are negatively influenced by the public expenses whereas other types are positively correlated with these expenses. Schiff (1990) obtains quite similar results. Day and Devlin (1996) show that, in Canada, government expenses influence only the decision to volunteer but not the number of hours donated. More precisely, they find that the decision to volunteer is positively correlated with government expenditure at the aggregated level but, on again, the sign of this relation varies according to the types of volunteering. Using American data, Duncan (1999) cannot confirm the crowd-out hypothesis. Simmons and Emanuele (2004) find a negative and statistically significant effect of government expenditure on volunteering but these authors acknowledge that "the values of these coefficients, however, are very small and suggest that although the relationship is statistically significant, it may not be economically significant" (p. 508). Prouteau and Wolff (2005), from a French data base, show that the level of public expenditure measured at the departmental level has no effect on time and money donations. But all these works are conducted in a national context.

In the framework of an international study, Salamon and Sokolwski (2001) observe the relation between the amount of national volunteering and two variables: the government social welfare spending and the government support for non-profit sector. Concerning the

former variable, the authors find that the higher the government social spending are, the higher the amount of volunteering, invalidating the "crowding out" hypothesis. Regarding the latter variable, the results are less conclusive since "the relationship between government financial support for the nonprofit sector and the amount of volunteering runs essentially in the same direction" (p. 10) but this relationship is not statistically significant. Hackl et al. (2009), using the data from the European and World Value Survey, include several country-level variables such as public social expenditure, a measure of political consensus, an index of democratization tax variables and public deficits, GDP per capita, GDP deflator, unemployment rate, an index of income distribution, the population size and political variables. Their results are favourable to the "crowding out" hypothesis since the higher the public social expenditure the lower the probability for volunteering.

For the purpose of studying the effect of country contextual variables on the propensity to volunteer, we use a multilevel analysis. Statistical multilevel models are recommended for analyzing multilevel data i.e. data which can be viewed as a multistage sample. That is the case in the European Values Survey since individuals (level one) are nested within their countries (level two). If we want to introduce country contextual variables, all individuals of the same country will have the same level-two variables. In this framework, using ordinary statistical tests is not convenient because they lead to statistically significant results which are spurious (Hox, 2002)[13.] Multilevel model analysis permits to overcome these problems. Appendix 1 presents the model we use.

We retain several level-2 variables obtained from different sources. Appendix 2 shows the value of these variables, the concerned years and the sources from which they were obtained. During the course of our investigation, we are led to remove some countries from the sample because we do not have the relevant information about them. In addition, because the number of countries is rather limited, we cannot introduce many country-level variables at once. In our comments, we do not pay attention to the effects of the individual-

[13] More precisely, Hox (2002, p. 3) emphasizes the fact that "a few data values from a small number of super-unit [the country level variables in our paper] are 'blown up' into many more values for a much larger number of sub-units [i.e. individuals in our paper]. The proper sample size for these variables is of course the number of higher-level units. Using the larger number of disaggregated cases for the sample size leads to significance tests that reject the null-hypothesis far more often than the nominal alpha level suggests."

level variables because these effects are quite similar to those previously shown in Table 3 (column 1) and they are indifferent to the type of variable included at the country-level (see the different columns of Table 5).

In a first step, we consider the GDP per capita observed during the year of the survey[14]. Alternatively, to have a more appropriate index of the average national standard of living, we retain the per capita Gross National Income adjusted by purchasing power parity. When including the former or the latter economic indicator as sole country-level variable, we obtain a significantly positive effect (Table 5 columns I and II) which suggests that the propensity to volunteer in organizations is an increasing function of the average national standard of living[15].

Insert Table 5 here

In a second step, we consider the following supplementary country-level variables: unemployment rate, total general

government expenditure as percentage of GDP, total social protection expenses as percentage of GDP and an index of inequality of income distribution. This index is defined as the income quintile share ratio that is the ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile). For this second stage, for lack of information, we remove Turkey, Russia, Ukraine, Belarus and Croatia from the sample.

With the exception of unemployment rate, all these variables have a significant effect when they are introduced as sole country-level variable in the regressions (table X, columns III to VI). Interestingly, we can observe that the coefficient of the income inequality index is significantly negative, which suggest that after controlling for the demographic and socioeconomic compositions of national populations, the average propensity to volunteer decreases when the income inequality becomes higher. Even if it becomes significant only

[14] The year of the survey was 1999 in most countries, but it was 2000 in Finland and Belarus and 2001 in Turkey. In this first step, we remove Northern Ireland from the sample.

[15] We have to notice that this result concerns only formal volunteering (that is volunteering in an organization). Conclusions about informal volunteering might be different, but the European Values Survey gives no information about this volunteering.

at the 10 percent level, this effect persists when we include as covariate the GNI per capita whose positive coefficient becomes not statistically significant (column VIII). On the other hand, when we introduce the social protection expenses as additional country-level covariate, the coefficient of the income inequality variable is no longer statistically significant though it remains negative (column IX). These results are at variance with the ones obtained by Hackl et al. (2009) who, with a different index, find a positive relation between income inequality and voluntary work at the country level[16]. Another important result from our investigation does not agree with theirs. It concerns the effect of social expenses on volunteering. Hackl et al (2009) conclude that Public social expenses as percentage of GDP have a negative and significant influence on voluntary work. On the contrary, we find a significantly positive effect of total social protection expenses as percentage of GDP on the propensity to volunteer. This effect appears as a robust one since it persists when we include other level-country variables such GNI per capita and the income inequality index. In this case, the coefficients of the two latter variables keep their sign but lose their statistical significance[17]. Indeed, it is the impact of social protection expenses which prevails.

It is necessary to note that a test about the possible crowding effects of public action has to be conducted not only by considering the decision to volunteer, as it is the case in our paper and in the one of Hackl et al. (2009), but also by taking account of the amount of time donated. Unfortunately, as previously mentioned, the European Values Survey, like the World Value Survey, does not give any information on the time that volunteers dedicate to their unpaid activities. Consequently, the impact of social expenses on volunteering deserves to be further examined. Nevertheless our investigation gives no support to the conjecture that social expenses are unfavourable to volunteering. On the contrary, at least in European countries, the relation between the total social protection expenses and the propensity to volunteer seems to be positive.

---

[16] As inequality index of income distribution, these authors use the Gini coefficients.

[17] These changes in the significance of the coefficients may perhaps be explained by the positive correlation between the GNI per capita variable and the total social protection expenses one, on the one hand (the higher the former, the higher the latter), and, on the other hand, by the negative correlation between the total social protection expenses variable and the income inequality index one (the higher the former, the lower the latter).

We have replicated this multi-level analysis by considering each type of volunteering. The results are unreported here but they are available upon request to the authors. None of the country-level variables that we consider influences the professional and political volunteering. The GNI per capita variable has a significant positive impact on social volunteering and leisure one, while the coefficient of the total social protection expenses is significantly positive in the regression concerning religious volunteering. The higher the total general government expenses are the higher the level of leisure volunteering. Last, the inequality of income distribution seems to be more particularly unfavourable to the volunteering dedicated to the defence of causes.

4.2. Are the effects of individual variables the same in all countries?

The previous analysis assumes that only the intercept of the multilevel model changes across the countries. We have not considered a possible variation of the individual variables' coefficients. Such a conjecture leads to modify the writing of the model (see appendix 1) but the estimations become more complex because of numerous interaction terms between level-2 and level-1 variables and such an investigation is beyond the scope of this paper.

We only explore the relevancy of such a future work by examining the following question: do the effects of individual variables appear similar across countries. For the purpose of this preliminary investigation, we run a logistic regression on each country. Table 6 shows only the signs and the levels of significance of these effects[18]. Of course, because the number of observations for each country is limited, it is possible that some effects do not come to light. Therefore we have to be prudent in our comments.

We can see, once again, that two variables have a clear and similar impact on the propensity to volunteer. The first one is education level. Individuals with a higher level of education are more inclined to be volunteers except in Greece, Ukraine and Slovenia where this variable has no established influence, and in Belarus and Sweden where the effect is uncertain and apparently limited. The second variable which has a similar influence on volunteering in almost all countries relates to the religious belief and practice. Individuals

[18] The complete results are available upon request.

who regularly (and often irregularly) go to the church service are more inclined to volunteer. Romania, Turkey, Poland, Greece and Turkey are the exceptions. The cases of Malta and Poland may be surprising because they are very religious countries. Precisely, the results may perhaps be explained by the very limited number of individuals without religious belief and attendance which constitute the reference category[19].

The roles played by the other variables on volunteering are less systematic and their nature may vary from a country to another. For instance, gender is without effect in several countries while in other ones women have a lower propensity to volunteer than men have. Sometimes, but not always, the presence of a very young child is unfavourable to volunteering while the presence of older children is rather favourable except in Poland where it is dissuasive. In a majority of countries, domestic income has no attested impact on the propensity to give time but in several cases individuals with high domestic income are more inclined to volunteer. The age profile of volunteers is at times inverted-U shaped but it may also be occasionally U-shaped (Estonia, Latvia, and Russia). Having a paid job is likely to enhance the propensity to volunteer but in France and in Malta the opposite is true. Marital status has rarely an influence on volunteering but, when it is the case, living with a partner may either increase (Iceland, Hungary and Russia) or decrease (Slovakia, Bulgaria and Italy) the individual proclivity to volunteer. Living in a large town is rather associated with lower probability of volunteering except in Ukraine and, to a lesser extent, in Spain and Romania. Concerning the attitudinal variables, we can observe that the individuals who do not have a political orientation or who do not want to claim it have occasionally a lower tendency to volunteer than left-oriented individuals (reference category). Having middle-ground oriented positions is also from time to time associated to a lower probability of volunteering while being right-oriented has more rarely an effect on voluntary work. In addition, the sign of this effect is ambiguous: it is negative in Italy, Spain, Belgium, Iceland and Ireland but positive in Estonia and Latvia. The degree of confidence in social security system and the degree of satisfaction in democracy exert a rare and ambiguous influence on volunteering. Concerning the former, persons who have not very much or not at all

[19] In Poland like in Malta, more 90% of the samples' individuals declare to go irregularly or regularly to church services. Consequently, there are very few individuals in the two first category of this variable and particularly in the reference category.

confidence are less often volunteers in Czech Republic, Slovakia, Hungary and Belarus, but they are more often volunteers in Slovenia, Turkey and Iceland. Regarding the satisfaction with democracy, persons not very or not at all satisfied are more inclined to volunteer in Belgium, Luxemburg and Denmark. On the contrary, they are less prone to do such unpaid activities in Lithuania.

In short, after this preliminary and quick examination, we can suggest that some individual characteristics have a rather homogeneous effect on aggregate volunteering in almost all countries whereas other variables may exert a more dissimilar influence from a country to another. To explain the dissimilarity in the influence of a same variable at the aggregate level of volunteering, two assumptions – at least – can be evoked. First, we know that some characteristics play a different role from one type of volunteering to another (see section 3). Consequently, it is logical that the concerned characteristics have different effects on aggregate volunteering as the distribution of voluntary work types differs according to the countries (see section 2). Secondly, it is possible that a same characteristic has a different impact in different countries, even with respect to a same type of volunteering, for instance because of contextual factors. So, we are brought back to the multi-level model with interaction effects between individual characteristics and country-level variables. We have to disentangle these two possible explanations. This subject calls further investigations for future researches.

5. Conclusion

In this paper, we study volunteering at the European level. First, we observe the prevalence of such a behavior and the distribution of volunteers among six types of activity in each country considered by the EVS. We distinguish several general shapes of volunteering according to the predominant type of unpaid activities. Then we investigate the determinants of volunteering by considering several demographic and socioeconomic variables of individuals as well as some attitudinal characteristics relating to political orientation of respondents and to their standpoint vis-à-vis some major institutions of society (the social protection system and the working of democracy).

Concerning the effect of demographic and socioeconomic factors on volunteering, our results are greatly in line with those observed from previous studies. Regarding the

influence of our attitudinal variables, conclusions are more uncertain because a great number of individuals do not answer questions of interest to us. Nevertheless, we disagree with Hackl et al (2009) who conclude that right-oriented citizens volunteer more than the left-oriented ones. From our investigation, such a result is observed only for the religious volunteering while the opposite is true regarding occupational and political volunteering as well as the defense-of-causes involvement. Obviously, the impact of such attitudinal variable deserves a further examination.

The more innovative part of our paper concerns the possible influence of country-level variables on the propensity to volunteer. Using a multilevel analysis model, we show in particular that social expenses do not crowd out volunteering. On the contrary, in European countries, formal volunteering seem a complement rather than a substitute for social protection expenses. In addition, our results suggest a negative effect of income inequality on volunteering though such a conclusion has to be put forward carefully.

Though several aspects of individual determinants of volunteering would certainly have to be better documented, the influence of country-level characteristics on such a behavior is a clearly less explored question. It seems to us that it deserves a great attention. In particular, the interactions between individual characteristics and country-level variables should be a stimulating topic for research. So, we could certainly better understand the national idiosyncrasies with respect to volunteering.

References

Archambault E. (2001), "Le travail bénévole en France et en Europe", *Revue Française des Affaires Sociales*, n° 2, pp. 13-36.

Archambault E., Boumendil J. (1997), *Les dons et le bénévolat en France – 1997*, Enquête réalisée pour la Fondation de France par le Laboratoire d'Économie sociale.

Badelt, C., Hollerweger, E. (2001), *Das Volumen ehrenamtlicher Arbeit in Österreic*, Working Paper nº 6, Wien: Wirtschaftsuniversität Wien, Abteilung für Sozialpolitik. (www.freiwilligenweb.at/pages/int_jahr/freiwilligenarbeit/studie_badelt.pdf)

Becker P. E., Dhingra P. W. (2001), "Religious Involvement and Volunteering: Implication for Civil Society", *Sociology of Religion*, 62 (3), pp. 315-335.

Bekkers R. (2005), "Participation in Voluntary Associations: Relations with Ressources, Personality, and Political Values", *Political Psychology*, 26, pp. 439-454.

Bekkers R. (2005), "Intergenerational Transmission of Volunteering", *Acta Sociologica*, 50 (2), pp. 99-114.

Bulut I. (2203), "A Generalist Approach in Social Work Education in Turkey", *Social Work and Society*, 1 (1), pp. 128-137.

Day K. M., Devlin R. A. (1996), "Volunteerism and crowding-out: Canadian econometric evidence", Canadian Journal of Economics, 29, pp. 37-53.

Duncan B. (1999), "Modeling charitable contributions of time and money", Journal of Public Economics, 72, pp. 213-242.

Esping-Andersen G. (1990), *The Three Worlds of Welfare Capitalism*, Princeton, Princeton University Press.

Garcia Delgado J. L. (2004), *Las cuentas de la economia social. El tercer sector en Espana*, Civitas Ediciones, Madrid.

García-Mainar I., Marcuello C. (2005). *Participation in nonprofit Organizations: an Economic Model*, BBVA Foundation project "sociales 02" and Aragon Regional Government Research Group.

García-Mainar I., Marcuello C. (2007), "Members, Volunteers, and Donors in Nonprofit Organizations in Spain", *Nonprofit and Voluntary Sector Quarterly*, 36, pp. 100-120.

Gocko B (2007) "Aspekt Spoleczno-prawny Woluntariatu w III Rzeczpospolitej Polskiej", *Seminare,* 24, pp. 355-370.

Grönlund H., Yeung A. B. (2006), The Role of Voluntary Social Work in Finland *NOPUS NEWS* 4/2006 [HTTP://WWW.NOPUS.ORG/?ID=195&CID=2465]

Hackl F., Halla M. dnd G. J. Pruckner (2009), *Volunteering and the State*, IZA Discussion Paper series n° 4016.

Hertzig L (2004), "Corporate volunteering in Germany, Survey and Empirical Evidence", *International Journal of Business Environment*, 1 (1), pp. 51-69, available at http://www.nemac.ufsc.br/visualizar/corporate.pdf

Hox J. (2002), *Multilevel Analysis. Techniques and Applications*, Mahwah, London: Lawrence Elbaum Associates, Publishers.

Low N., Butt S., Paine A. E. and J. Davis Smith (2007), *Helping Out: A national survey of volunteering and charitable giving*, National Centre for Social Research, Institute for Volunteering Research.

Menchik P. L., Weisbrod B. A. (1987), "Volunteer Labor Supply", *Journal of Public Economics*, 32, pp. 159-183.

Powell W. W, Steinberg R. (2006), *The Non Profit Sector- Research Handbook*, 2nd Ed., Yale University Editions.

Prouteau L., F.-C. Wolff (2004), "Donner son temps : les bénévoles dans la vie associative", *Économie et Statistique*, n° 372, pp. 3-39.

Prouteau. L, Wolff F. C (2005) "Les dépenses publiques évincent-elles les contributions volontaires aux associations ?", Revue économique, 56, pp. 679-690.

Salamon L. M., Anheier H. K. (1998), "Defining the nonprofit sector. A cross-national analysis", *Voluntas*, 9, pp. 213-248.

Salamon L. M., Anheier H. K., List R., Toepler S., and S. W. Sokolowski (1999), *Global civil society : dimensions of the nonprofit sector*, Baltimore, MD: The Johns Hopkins Center for Civil Society Studies

Salamon L. M., Sokolwski W. (2001), *Volunteering in Cross-national Perspective: Evidence From 24 Countries*, Working Papers of the Johns Hopkins Comparative Nonprofit Sector Project.

Schiff J. (1990), *Charitable Giving and Government Policy. An Economic Analysis*, New-York: Greenwood Press.

Simmons W. O., Emanuele R. (2004), "Does Government Spending Crowd Out Donations of Time and Money? ", *Public Finance Review*, 32, pp. 498-511.

Smith D. (1994), "Determinants of voluntary association participation and volunteering" *Nonprofit Voluntary Sector Quarterly*, 23, pp.243-263.

Steinberg K. S., Rooney P. M. and W. Chin (2002), « Measurement of Volunteering: A Methodological Study Using Indiana as a Test Case », *Nonprofit and Voluntary Sector Quarterly*, 31, pp. 484-501

Wilson J. (2000), "Volunteering ", *Annual Review of Sociology*, 26, pp. 215-240.

Table 1. Participation rates in volunteering in European countries (%)

Country	Gross rate	Weighted rate*
France	27.1	26.1
Great-Britain	42.3	43.1
West-Germany	22.0	22.3
East-Germany	16.4	17.2
Overall Germany	19.3	21.3
Austria	30.4	30.5
Italy	26.1	26.1
Spain	17.6	17.6
Portugal	16.4	13.8
Netherlands	49.2	49.8
Belgium	35.4	35.7
Denmark	37.2	37.2
Sweden	56.1	56.4
Finland	38.0	38.4
Iceland	32.6	32.6
Northern-Ireland	21.1	22.3
Ireland	32.6	30.5
Estonia	18.0	17.8
Latvia	22.4	22.4
Lithuania	15.8	13.5
Poland	13.9	13.7
Czech Republic	32.2	32.5
Slovakia	51.4	51.2
Hungary	15.4	14.8
Romania	15.7	15.7
Bulgaria	18.8	16.5
Croatia	23.6	21.6
Greece	39.8	39.8
Russia	7.8	7.9
Malta	28.6	28.4
Luxembourg	30.2	30.6
Slovenia	28.5	28.5
Ukraine	13.0	13.1
Belarus	18.8	18.8
Turkey	6.4	6.4

Source: Third wave of European Values Survey.

Table 2. Distribution of the volunteers according to the activity sector (%)

Type of volunteering / Country	Social	Leisure	Political-Occupational	Defense of causes	Religion	Other
France	25.6	48.4	11.4	7.8	12.0	27.0
Great-Britain	76.0	14.8	23.0	32.8	14.7	3.8
West-Germany	21.8	44.3	7.5	12.1	28.7	11.9
East-Germany	17.5	40.5	14.0	15.1	12.6	18.7
Overall Germany	21.2	43.9	8.5	12.6	26.0	13.0
Austria	20.8	46.8	18.4	16.8	22.9	16.6
Italy	34.2	42.0	25.3	14.6	25.7	12.3
Spain	28.9	34.1	15.6	19.0	20.9	23.7
Portugal	18.7	43.2	9.5	5.7	18.9	22.4
Netherlands	32.0	59.8	15.0	15.5	22.8	19.7
Belgium	35.4	43.0	18.2	25.3	15.5	25.7
Denmark	24.9	47.8	22.6	11.0	8.9	25.5
Sweden	26.1	46.7	28.5	15.4	41.6	25.3
Finland	36.3	42.6	18.9	17.5	20.4	18.7
Iceland	39.6	48.7	24.7	13.0	14.2	7.3
Northern-Ireland	34.8	25.1	11.7	14.4	42.5	24.7
Ireland	29.4	49.1	18.1	16.0	25.0	24.1
Estonia	23.4	44.5	17.1	14.9	15.5	25.2
Latvia	13.2	43.2	15.0	5.3	17.2	28.6
Lithuania	14.7	26.5	19.2	6.2	31.1	20.0
Poland	23.0	26.0	24.4	7.0	26.9	22.0
Czech Republic	32.6	44.9	19.9	13.7	8.5	19.0
Slovakia	26.8	35.6	24.8	13.5	25.6	24.1
Hungary	29.9	31.7	23.4	15.3	36.4	18.4
Romania	12.8	17.8	51.1	6.7	22.8	13.3
Bulgaria	19.6	34.3	38.0	13.8	17.0	13.9
Croatia	18.1	41.6	30.8	18.8	24.5	18.8
Greece	33.5	46.5	27.5	38.3	15.4	25.8
Russia	13.1	21.7	54.0	9.5	6.5	15.1
Malta	26.3	29.9	22.9	12.6	44.9	18.4
Luxembourg	44.1	49.5	17.1	32.8	19.9	14.5
Slovenia	31.0	46.0	20.6	14.6	15.7	38.0
Ukraine	16.0	18.8	39.4	6.3	17.4	15.6
Belarus	23.4	16.0	33.0	19.7	21.8	10.1
Turkey	15.6	26.0	62.3	7.8	10.4	22.1

Note: The sum of the shares is higher than 100% because of the multi-participations.
Source: Third wave of *European Values Survey*

Table 3: Determinants of volunteering – Logit model

Type of volunteering Characteristics	(1) Aggregate	(2) Social	(3) Leisure	(4) Occupational and political	(5) Defense of causes	(6) Religion (a)	(7) Religion (b)	(8) Other
Constant	-1.617***	-3.235***	-1.448***	-5.531***	-4.940***	-7.385***	-5.068***	-3.201***
Gender								
Male								
Female	- 0.243***	0.225***	-0.534***	-0.464***	0.325***	0.036	0.268***	-0.351***
Age	0.0106**	-0.0001	-0.0206***	0.0528***	0.028***	0.0366***	0.042***	0.0194**
Age square	-0.0001**	-8.57E-7	0.00007	-0.00044***	-0.00029***	-0.00033***	-0.00025***	-0.00013
Marital status								
Single								
Living with partner	-0.023	-0.104**	0.050	0.148**	-0.036	-0.129**	-0.094*	0.050
Children aged under 18 at home								
No								
Yes, with one at the least aged -5	-0.188***	-0.329***	-0.230***	-0.083	-0.481***	0.002	0.114	-0.088
Yes, with none aged -5	0.071**	0.018	0.178***	0.104**	-0.127**	-0.067	-0.001	-0.001
Education								
Elementary								
Basic professional and secondary intermediate	0.280***	0.328***	0.381***	0.218***	0.303***	0.257***	0.212***	0.245***
Full secondary, maturity level certificate	0.596***	0.589***	0.726***	0.514***	0.723***	0.487***	0.446***	0.400***
Higher education	0.919***	0.802***	0.968***	0.967***	0.995***	0.698***	0.707***	0.700***
Domestic income								
Unknown	0.086**	0.0754	0.224***	0.104	-0.141	-0.038	-0.057	0.025
Low								
Medium	0.223***	0.204***	0.290***	0.236***	0.067	0.106	0.064	0.135**
High	0.333***	0.302***	0.440***	0.319***	0.124	0.152**	0.068	0.126*
Paid job								
Yes	0.154***	-0.077	0.119***	0.735***	0.033	-0.133*	-0.240***	-0.019
No								
Religion								
No religious belief								
Religious beliefs without church attendance	-0.069	-0.192***	-0.000	-0.151*	-0.168*	2.042***		0.064
Religious beliefs with irregular church attendance	0.346***	0.387***	0.243***	0.100	0.295***	2.811***		0.320***
Religious belief with regular church attendance	1.072***	0.944***	0.396***	0.239***	0.783***	5.208***		0.625***
Size of town								
Unknown	-0.432***	-0.269*	-0.531***	-0.234	-0.168	-0.438***	-0.664***	-0.169
Small								
Medium	-0.056*	0.082	-0.126***	0.057	-0.117*	-0.167***	-0.288***	-0.236***
Large	-0.206***	-0.063	-0.355***	-0.050	-0.295***	-0.104	-0.333***	-0.279***
Political orientation								
Left								
Middle ground	-0.120***	-0.044	-0.130***	-0.360***	-0.291***	0.113	0.422***	-0.198***
Right	-0.060	-0.045	-0.057	-0.193***	-0.299***	0.165**	0.665***	-0.105
No orientation or unknown	-0.377***	-0.290***	-0.357	-0.905***	-0.457***	0.022	0.422***	-0.457***
Degree of confidence in social security system								
A great deal or quite a lot								
Not very much or not at all	-0.013	-004	-0.041	0.045	0.035	-0.024	-0.131***	-0.082
Unknown – no response	-0.132**	-0.079	0.069	0.050	-0.099	-0.103	-0.219*	-0.234*
Degree of satisfaction with democracy								
Very or rather satisfied								
Not very satisfied or not at all	-0.010	0.043	-0.094**	0.031	0.133**	0.109**	-0.037	0.104**
Unknown	-0.220***	-0.108	-0.483***	-0.130	-0.175	0.171	0.085	-0.035

Table 3 continued: Determinants of volunteering – Logit model

Type of volunteering Characteristics	(1) Aggregate	(2) Social	(3) Leisure	(4) Occupational and political	(5) Defense of causes	(6) Religion (a)	(7) Religion (b)	(8) Other
Country								
France								
Great-Britain	0.781***	1.960***	-0.845***	1.229***	2.302	0.240	0.774***	-1.490***
Germany	-0.441***	-0.703***	-0.435***	-0.387*	0.407	0.002	0.244	-0.932***
Austria	-0.004	-0.156	-0.006	0.680***	1.016	-0.054	0.753***	-0.444***
Italy	-0.554***	-0.206	-0.492***	0.615***	0.290	-0.726***	0.786***	-1.061***
Spain	-0.718***	-0.473***	-0.939***	-0.019	0.534	-0.901***	0.171	-0.589***
Portugal	-1.011***	-1.147***	-0.907***	-0.373	-0.627	-1.273***	-0.037	-0.868***
Netherlands	0.714***	0.672***	0.844***	0.538***	1.224	1.165***	1.291***	0.193
Belgium	0.096	0.264**	-0.057	0.610***	1.406	-0.140	0.513***	0.201
Denmark	0.293***	0.249	0.121	0.797***	0.635	0.061	-0.196	0.180
Sweden	1.270***	0.871***	0.849***	1.654***	1.547	2.700***	2.282***	0.696***
Finland	0.507***	0.760***	0.243**	0.969***	1.409	0.961***	0.884***	-0.056
Iceland	0.152	0.720***	0.032	0.737***	0.847	0.459**	0.393*	-1.212***
Northern-Ireland	-0.622***	-0.226	-0.910***	-0.186	0.128	-0.371*	1.098***	-0.572***
Ireland	-0.368***	-0.118	-0.068	0.507**	0.671	-0.823***	0.959***	-0.302*
Estonia	-0.628***	-0.606***	-0.619***	-0.045	0.265	-0.016	-0.285	-0.479***
Latvia	-0.267***	-1.072***	-0.282**	0.189	-0.685	-0.031	-0.051	-0.146
Lithuania	-1.521***	-1.451***	-1.437***	-0.106	-0.781	-0.727	-0.039	-1.008***
Poland	-1.521***	-1.391***	-1.698***	-0.151	-0.967	-1.848***	-0.045	-1.165***
Czech Republic	0.172**	0.365***	-0.001	0.624***	0.688	-0.177	-0.241	-0.125
Slovakia	0.650***	0.364***	0.112	1.397***	0.968	0.096	1.488***	0.385***
Hungary	-0.854***	-0.596***	-1.180***	-0.039	0.105	0.201	0.437**	-1.010***
Romania	-1.021***	-1.672***	-1.880***	1.053***	-0.824	-1.085***	0.017	-1.433***
Bulgaria	-0.807***	-1.035***	-1.147***	0.805***	-0.012	-1.250***	-0.873***	-1.377***
Croatia	-0.757***	-0.890***	-0.726***	0.746***	0.190	-0.850***	0.475**	-1.065***
Greece	0.043	0.176	-0.102	0.960***	1.686	-0.162	0.729***	0.132
Russia	-1.561***	-2.046***	-2.297***	0.293	-0.991	-1.791***	-1.970***	-1.851***
Malta	-0.717**	-0.616***	-0.916***	0.677***	0.291	-0.576***	1.406***	-0.648***
Luxembourg	-0.018	0.577***	-0.003	0.544***	1.726	-0.134	0.584***	-0.552***
Slovenia	-0.070	0.159	-0.150	0.696***	0.748	-0.351	0.300	0.382***
Ukraine	-1.140***	-1.560***	-1.960***	0.477**	-1.091	-0.924***	-0.547**	-1.454***
Belarus	-0.505***	-0.530***	-1.652***	0.821***	0.669	0.169	0.158	-1.325***
Turkey	-2.067***	-2.189***	-2.388***	0.443**	-1.390	-3.043***	-1.506***	-1.793***
Log Likelihood	-20440.05	-9733.68	-11926.04	-8102.56	-6402.07	2,218	2,218	2,123
Number of volunteers	10,523	3,103	4,261	2,393	1,742	-6398.69	-7802.46	-7678.56
Number of observations	40,213							

Significance levels: * = 10 percent; ** 5 percent; *** = 1 per cent.
Source: Third wave of the European Values Survey

Tableau 4. The propensity of countries to volunteering after controlling for individual characteristics. Descending order.

Type of volunteering							
Global	**Social and health**	**Leisure**	**Professional and political**	**Defence of causes**	**Religion - a**	**Religion - b**	**Other**
Sweden	Great-Britain	Sweden	Sweden	Great-Britain	Sweden	Sweden	Sweden
Great-Britain	Sweden	Netherlands	Slovakia	Luxembourg	Netherlands	Slovakia	Slovenia
Netherlands	Finland	Finland	Great-Britain	Greece	Finland	Malta	Slovakia
Slovakia	Iceland	Denmark	Romania	Sweden	Iceland	Netherlands	Belgium
Finland	Netherlands	Slovakia	Finland	Finland	Great-Britain	Northern Ireland	Netherlands
Denmark	Luxembourg	Iceland	Greece	Belgium	Hungary	Ireland	Danemark
Czech Republic	Czech Republic	Austria	Belarus	Netherlands	Belarus	Finland	Greece
Iceland	Slovakia	France	Bulgaria	Austria	Slovakia	Italy	France
Belgium	Belgium	Czech Republic	Denmark	Slovakia	Denmark	Great-Britain	Finland
Greece	Denmark	Luxembourg	Croatia	Czech Republic	Germany	Austria	Czech republic
France	Greece	Belgium	Iceland	Ireland	France	Greece	Latvia
Luxembourg	Slovenia	Ireland	Slovenia	Belarus	Estonia	Luxembourg	Ireland
Austria	France	Greece	Austria	Denmark	Latvia	Belgium	Austria
Slovenia	Ireland	Slovenia	Malta	Spain	Austria	Croatia	Estonia
Latvia	Austria	Latvia	Czech Republic	Iceland	Luxembourg	Hungary	Luxembourg
Ireland	Italy	Germany	Italy	Slovenia	Belgium	Iceland	Northern-Ireland
Germany	Northern Ireland	Italy	Belgium	Germany	Greece	Slovenia	Spain
Belarus	Spain	Estonia	Luxembourg	Malta	Czech Republic	Germany	Malta
Italy	Belarus	Croatia	Netherlands	Italy	Slovenia	Spain	Portugal
Northern-Ireland	Hungary	Great-Britain	Ireland	Estonia	Northern Ireland	Belarus	Germany
Estonia	Estonia	Portugal	Ukraine	Croatia	Malta	Romania	Lithuania
Malta	Malta	Northern Ireland	Turkey	Northern Ireland	Lithuania	France	Hungary
Spain	Germany	Malta	Russia	Hungary	Italy	Portugal	Italy
Croatia	Croatia	Spain	Latvia	France	Ireland	Lithuania	Croatia
Bulgaria	Bulgaria	Bulgaria	France	Bulgaria	Croatia	Poland	Poland
Hungary	Latvia	Hungary	Spain	Portugal	Spain	Latvia	Iceland
Portugal	Portugal	Lithuania	Hungary	Latvia	Ukraine	Denmark	Belarus
Romania	Poland	Belarus	Estonia	Lithuania	Romania	Czech Republic	Bulgaria
Lithuania	Lithuania	Poland	Lithuania	Romania	Bulgaria	Estonia	Romania
Ukraine	Ukraine	Romania	Poland	Poland	Portugal	Ukraine	Ukraine
Poland	Romania	Ukraine	Northern Ireland	Russia	Russia	Bulgarie	Great-Britain
Russia	Russia	Turkey	Germany	Ukraine	Poland	Turkey	Turkey
Turkey	Turkey	Russia	Portugal	Turkey	Turkey	Russia	Russia

Source: Third wave of European Values Survey.
Religion - a: with religious beliefs and church attendance as explanatory variable.
Religion - b: without religious beliefs and church attendance as explanatory variable.

Table 5: Multi-level analysis of European volunteering

	I	II	III	IV	V	VI	VII	VIII	IX
	Individual-Level Variables		**Individual-Level Variables**						
Intercept	-2.773***	-2.484***	-1.4502***	-0.668	-4.282***	-3.504***	-1.690**	-3.427**	-2.626***
Female	-0.247***	-0.248***	-0.2553***	-0.255***	-0.255***	-0.256***	-0.255***	-0.255***	-0.255***
Age	0.0105**	0.0105**	0.0156***	0.0155***	0.0155***	0.0155***	0.0155***	0.0155***	0.0155***
Age square	-0.00011**	-0.00011**	-0.00017***	-0.00017***	-0.00017***	-0.00017***	-0.00017***	-0.00017***	-0.00017***
Living with partner	-0.0235	-0.0234	-0/031	-0/032	-0/032	-0/032	-0/031	-0/031	-0/031
Children									
Children at home with none aged -5	-0.198***	-0.198***	-0.225***	-0.225***	-0.225***	-0.225***	-0.225***	-0.225***	-0.225***
Children at home, with one at the least aged -5	0.068**	0.068**	0.067**	0.067**	0.068**	0.068**	0.068**	0.068**	0.068**
Education									
Basic professional and secondary intermediate	0.272***	0.272***	0.270***	0.270***	0.270***	0.270***	0.270***	0.271***	0.271***
Full secondary, maturity level certificate	0.592***	0.592***	0.623***	0.622***	0.622***	0.624***	0.624***	0.625***	0.625***
Higher education	0.911***	0.911***	0.902***	0.901***	0.901***	0.902***	0.902***	0.903***	0.903***
Domestic income									
Unknown	0.077*	0.077*	0.070	0.071	0.071	0.069	0.069	0.068	0.069
Medium	0.210***	0.210***	0.214***	0.214***	0.214***	0.214***	0.214***	0.214***	0.214***
High	0.321***	0.321***	0.329***	0.329***	0.329***	0.328***	0.328***	0.328***	0.328***
Paid job	0.158***	0.157***	0.097***	0.097***	0.098***	0.098***	0.097***	0.097***	0.097***
Religion									
Religious belief without attendance	-0.069	-0.069	-0.102**	-0.101**	-0.101**	-0.102**	-0.102**	-0.102**	-0.102**
Religious belief with irregular attendance	0.347***	0.347***	0.3359***	0.336***	0.336***	0.337***	0.336***	0.337***	0.337***
Religious belief with regular attendance	1.056***	1.056***	1.040***	1.041***	1.041***	1.041***	1.041***	1.041***	1.041***
Size of town									
Unknown	-0.329***	-0.329***	-0.314***	-0.314***	-0.318***	-0.316***	-0.313***	-0.315***	-0.316***
Medium	-0.048	-0.048	-0.028	-0.028	-0.028	-0.029	-0.029	-0.029	-0.029
Large	-0.198***	-0.198***	-0.180***	-0.180***	-0.181***	-0.182***	-0.180***	-0.181***	-0.181***
Political orientation									
No orientation or unknown	-0.372***	-0.372***	-0.333***	-0.333***	-0.333***	-0.332***	-0.332***	-0.332***	-0.332***
Middle ground	-0.119***	-0.119***	-0.094***	-0.094***	-0.093***	-0.093***	-0.093***	-0.093***	-0.093***
Right	-0.058	-0.058	-0.045	-0.046	-0.045	-0.045	-0.045	-0.044	-0.045
Degree of confidence in social security system									
Unknown – no response	-0.140**	-0.140**	-0.177**	-0.179**	-0.178**	-0.177**	-0.176**	-0.176**	-0.176**
Not very much or not at all	-0.012	-0.012	-0.017	-0.017	-0.017	-0.017	-0.016	-0.016	-0.016
Degree of satisfaction with democracy									
Unknown	-0.219***	-0.219***	-0.178**	-0.178**	-0.178**	-0.178**	-0.178**	-0.178**	-0.177**
Not very satisfied or not at all	-0.008	-0.008	-0.013	-0.014	-0.014	-0.013	-0.012	-0.012	-0.012
	Country-level variables		**Country-level variables**						
Gross National Income (PPP) per capita	0.000045***						0.000031***	0.000019	0.000018
Gross Domestic Product per capita		0.000036***							
Unemployment rate			-0.04874						
Inequality index				-0.2769**			-0.187*		-0.132
Total general government expenses (% GDP)					0.05339***				
Total social protection expenses (% GDP)						0.0739***		0.05253**	0.04348*
-2 Log Pseudo-Likelihood	185048.4	185049.5	148820.5	148813.3	148815.0	148812.2	148838.7	148840.0	148847.2
Number of observations	39268		32411						

Note : Concerning the categorical variables, the reference values are the same as in Table 3. Significance levels: * = 10 percent; ** 5 percent; *** = 1 per cent.

Source: Third wave of the European Values Survey

Table 6: The profiles of volunteers according to countries

Countries / Characteristics	France	Great-B	Germany	Austria	Italy	Spain	Portugal	Netherl	Belgium	Denmark	Sweden	Finland	Iceland	Ireland	Estonia	Latvia
Gender																
Male																
Female	–			––	––	–	––	(–)	–	–						
Age	++		++	++	(+)		(+)	(+)		+			(+)		––	––
Age square	––		–	––				(–)		–					++	++
Marital status																
Single																
Living with partner					–								+			
Children aged under 18 at home																
No																
Yes, with one at the least aged -5						(–)		––								
Yes, with none aged -5									(+)			(+)				
Education																
Elementary																
Basic professional and secondary intermediate	+	(+)	++	+	+		(+)			(+)			+	+		
Full secondary, maturity level certificate		+	++	++	++	(+)	++		++		(+)		++			++
Higher education	++	++	++	++	++	+	++	+	++	+		++	++	++	++	++
Domestic income																
Unknown																
Low																
Medium	++				+									(+)		
High	+	+	++		++									+	+	
Paid job																
Yes	–										+			(+)	+	
No																
Religion																
No religious belief																
Religious belief without attendance					–	(–)										
Religious belief with irregular attendance		+	++					++	+		++	++		+	++	+
Religious belief with regular attendance	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++	++
Size of town																
Unknown										(–)						
Small																
Medium	–				–		+									––
Large	––			––	––	(+)		(–)					––		––	–
Political orientation																
Left																
Middle ground					–	–			–							
Right					––	–			–				(–)	–	+	(+)
No orientation or unknown			–		––	–			––	–				(–)		
Degree of confidence in social security system																
A great deal or quite a lot																
Not very much or not at all													+			
Unknown – no response														(+)	––	
Degree of satisfaction with democracy																
Very or rather satisfied																
Not very satisfied or not at all										(+)	+					
Unknown									(–)				–			
Number of observations	1605	890	1978	1512	1960	1188	997	996	1863	949	1013	982	951	957	1001	964

Table 6 continued: The profiles of volunteers according to countries

Countries / Characteristics	**Lithuan**	**Poland**	**Czech R.**	**Slovakia**	**Hungary**	**Romania**	**Bulgaria**	**Croatia**	**Greece**	**Russia**	**Malta**	**Luxemb.**	**Slovenia**	**Ukraine**	**Belarus**	**Turkey**
Gender																
Male																
Female		–	––	––			–	––			–		–			–
Age										––	+		(–)			
Age square										++			(+)			
Marital status																

Single																
Living with a partner				(–)	+		–			(+)						
Children aged under 18 at home																
No																
Yes, with one at the least aged -5	–		–										(–)			
Yes, with none aged -5		–										(+)				
Education																
Elementary																
Basic professional and secondary intermediate	+									+	++	(+)				
Full secondary, maturity level certificate	+	++	++	+		+	(+)			+	++	++			(+)	(+)
Higher education	++	++	++	+	++	++	++	+		++	++	++				++
Domestic income																
Unknown																
Low																
Medium				++			(+)									+
High				+							++	+		+		+
Paid job																
Yes						++	(+)			++	(–)				++	+
No																
Religion																
No religious belief																
Religious belief without attendance		(–)		–						+						
Religious belief with irregular attendance			++		++				(–)	+					(+)	
Religious belief with regular attendance	++		++	++	++		++	++		++		++	(+)	++	++	
Size of town																
Unknown																
Small		–														
Medium		(–)		(+)												
Large				––		(+)		––						+		
Political orientation																
Left																
Middle ground					(–)			–		(–)					–	––
Right																
No orientation or unknown				–	(–)			(–)		––					––	
Degree of confidence in social security system																
A great deal or quite a lot																
Not very much or not at all			–	(–)	(–)								+		(–)	(+)
Unknown – no response				––												
Degree of satisfaction with democracy																
Very or rather satisfied																
Not very satisfied or not at all	–											++				
Unknown							(–)	(+)					(+)	(–)	–	
Number of observations	1011	1081	1851	1329	985	1106	999	999	1098	2487	1002	1152	991	1174	997	1200

(+) or (–) = significance level 10%; + or – = significance level 5%; ++ or ––: =significance level 1% .
Source: Third wave of European Values Survey

Appendix 1

A multilevel model of the propensity to volunteer

In our paper, the dependent variable that we observe, y_{ij}, is the binary response concerning the voluntary behaviour for individual *i* in country *j* with y_{ij}=1 if the individual is volunteer and 0 otherwise. The probability of the response equal to one $[\Pr(y_{ij}=1)]$ is noted p_{ij} . Let p_{ij} be modelled using a logit link function. Logistic regression transforms the dependent variable:

$$\eta_{ij} = \log\left(\frac{p_{ij}}{1-p_{ij}}\right).$$

The multilevel model appears as follows.

Individual level or level-1 model:

$$\eta_{ij} = \gamma_{0j} + \gamma_{1j}X_{1ij} + \gamma_{2j}X_{2ij} + ... + \gamma_{nj}X_{nij} \qquad (1)$$

where γ_{0j} is the intercept, $\gamma_{1j},....,\gamma_{nj}$ are the coefficients associated to the n explanatory variables $X_1,....,X_n$.

Country level or level-2 model:

$$\gamma_{0j} = \beta_{00} + \beta_{01}Z_j + u_{0j} \qquad (2)$$

and $\beta_{1j} = \gamma_{1j}$, $\beta_{2j} = \gamma_{2j},....., \beta_{nj} = \gamma_{nj}$ (3)

The question is to explain a possible variation of intercept (γ_{0j}) according to the countries by introducing an explanatory variable (Z_j) at the level 2. For instance Z_j may be the social expenses as percentage of GDP. If β_{01} is positive, the average propensity to volunteer is higher in countries having more important social expenses, and the opposite is true if β_{01} is negative. We can introduce several explanatory variables of Z_j type. u_{0j} in equation (2) is a residual error term which is assumed normally distributed with a mean of zero and a variance $\sigma^2_{u_0}$. It is important to notice that from (3) we assume that the regression coefficients associated to the explanatory variables $X_1,....,X_n$ do not vary across countries.

Combining (1), (2) and (3) gives:

$$\eta_{ij} = \beta_{00} + \beta_{11}X_{1ij} + \beta_{22}X_{2ij} + ... + \beta_{nn}X_{nij} + \beta_{01}Z_j + u_{0j} \quad (4)$$

In this version of the model, β_{00}, β_{11}, , β_{nn}, β_{01} are the fixed effects while u_{0j} is the random effect.

To estimate this combined model, we use the GLIMMIX procedure from SAS software.

If we assume that coefficients of individual-level variables change across countries, the equations of the country-level (see appendix 1) changes to become:

$$\gamma_{0j} = \beta_{00} + \beta_{01} Z_j + u_{0j} \qquad (2)$$

$$\left.\begin{array}{l} \gamma_{1j} = \beta_{10} + \beta_{11} Z_j + u_{1j} \\ \ldots\ldots\ldots\ldots\ldots \\ \gamma_{nj} = \beta_{n0} + \beta_{n1} Z_j + u_{nj} \end{array}\right\} \quad (3)$$

And the equation (4) of the combined model becomes:

$$\eta_{ij} = \beta_{00} + \beta_{01} Z_j + u_{0j} + \beta_{10} X_{1ij} + \beta_{11} Z_j X_{1ij} + u_{1j} X_{1ij} + ... + \beta_{n0} X_{nij} + \beta_{n1} Z\ X_{nij} + u_{nj} X_{nij} \quad (4)$$

After rearranging, we have:

$$\eta_{ij} = \beta_{00} + \beta_{10} X_{1ij} + ... + \beta_{n0} X_{nij} + \beta_{01} Z_j + \beta_{11} Z_j X_{1ij} + ... + \beta_{n1} Z\ X_{nij} + u_{0j} + u_{1j} X_{1ij} + ... + u_{nj} X_{nij}$$

Now, we have $\left[\beta_{00} + \beta_{10} X_{1ij} + ... + \beta_{n0} X_{nij} + \beta_{01} Z_j + \beta_{11} Z_j X_{1ij} + ... + \beta_{n1} Z\ X_{nij}\right]$ as fixed effects and $\left[u_{0j} + u_{1j} X_{1ij} + ... + u_{nj} X_{nij}\right]$ as random effects.

Note that in this version we have only one explanatory variable at the country level. With two or more variables of this type, the expression of (4) is more complex.

So, as a consequence of the assumption that coefficients of individual-level variables vary across countries, interaction terms such as $Z_j X_{1ij}$, …., $Z_j X_{nij}$ appear. As Hox (2002, p. 14) writes, the interpretation of interaction terms in multiple regression analysis requires a great attention. For instance, let Z_j be once again the social expenses variable and X_1 the gender variable at the individual level. If β_{11} is positive, the gender effect on the propensity to volunteer is higher in countries with a high level of social expenditure. The opposite is true if β_{11} is negative.

Appendix 2

Country-level variables: definition, values and sources.

Countries	(1) GDP per capita	(2) GNI per capita (PPP)	(3) Unemploy-ment rate	(4) Total social protection expenses (as % GDP)	(5) Total general government expenditure (as % GDP)	(6) Income inequality index
France	24080	26281	10.4	29.9	52.6	4.4
Great-Britain	25598	25583	5.9	25.7	38.9	5.2
Germany	26131	25711	8.2	29.2	48.1	3.6
Áustria	26416	28593	3.9	29.0	53.7	3.7
Italy	21055	25296	10.9	24.8	48.2	4.9
Spain	15468	21116	12.5	19.8	39.9	5.7
Portugal	11957	16646	4.5	21.4	43.2	6.4
Netherlands	25998	30019	3.2	27.1	46.0	3.7
Belgium	24970	28310	8.5	27.0	50.2	4.2
Denmark	33726	28196	5.2	29.8	55.5	3.0
Sweden	29053	27525	6.7	31.0	58.6	3.1
Finland	23543	25489	9.8	25.1	48.3	3.3
Iceland	31393	28025	2.3	18.8	42.0	3.4
Ireland	25713	24601	5.6	14.6	34.1	4.9
Estónia	4123	9422	13.6	13.9	40.1	6.3
Látvia	3046	8005	14.0	17.2	41.8	5.5
Lithuania	3098	8454	13.7	16.3	39.9	5.0
Poland	4360	10419	13.4	19.7	42.7	4.7
Czech Republic	5875	14706	8.6	19.2	42.3	3.4
Slovakia	3807	10815	16.4	20.2	48.1	3.9
Hungary	4817	11723	6.9	20.3	48.4	3.3
Romania	1600	5688	7.1	13.0	39.2	4.5
Bulgária	1606	6039	16.4	16.0	41.8	3.7
Croatia	5081	10399	14.8			4.6
Greece	12897	18397	12.0	22.7	44.4	6.2
Rússia	1331	7407				
Malta	10108	17873	6.7	17.8	43.0	4.6
Luxembourg	49120	46615	2.4	20.5	39.2	3.9
Slovenia	11177	17498	7.3	24.1	46.5	3.2
Ukraine	640	3192				
Belarus	1036	5097				
Turkey	2906	8723	6.5			10.8

(1) GDP per capita: at current prices, US dollars, during the year of EVS. Source: United Nations data: http://data.un.org/

(2) GNI per capita, purchasing power parity, current international dollars. Year: 2000. Source: calculations of the authors from United Nations data.

(3) Unemployment rate (percentage). Years: 1999 except for Iceland, Estonia, Bulgaria, Malta, Bulgaria, Turkey (2000) and Croatia (2002).

(4) Total social protection expenses. Source: Eurostat. Years: 1999 except for Estonia, Poland, Romania (2000) and Bulgaria (2005). Unavailable data for Croatia, Russia, Ukraine, Belarus and Turkey.

(5) Total general government expenditure. Source: Eurostat. Years of the survey. Unavailable data for Croatia, Russia, Ukraine, Belarus and Turkey.

(6) Income inequality index defined as the income quintile share ratio that is the ratio of total income received by the 20% of the population with the highest income (top quintile) to that received by the 20% of the population with the lowest income (lowest quintile). Years: 1999 except for Estonia, Latvia, Lithuania, Poland, Hungary, Romania, Bulgaria, Slovenia (2000), Czech Republic (2001), Turkey (2002), Croatia (2003), Iceland (2004) and Slovakia (2005). Unavailable data for Russia, Ukraine and Belarus.

Note: Data concerning United-Kingdom has been affected to Great-Britain for lack of more precise information.